



Erasmus+

Higher Education Learning Agreement for Traineeship

Patrik Reizinger
Academic Year 2017/2018

After the mobility

Student	Last name(s)	First name(s)	Nationality	Sex (M/F)	Date of birth	Field of study
	Reizinger	Patrik	Hungarian	M	10. December 1996	0714
Sending University	Name, faculty		Erasmus code ¹⁹	Contact person name ²⁰		Contact person email; phone
	Budapest University of Technology and Economics		HU BUDAPE02	Médea TERCZY; Diána GALI;		erasmus@mail.bme.hu; +36 1 463 2237; +36 1 463 2452;
Receiving Organization / Enterprise	Name, department		Contact person ²¹ name; position; email; phone		Mentor ²² name; position; email; phone	
	Fraunhofer Institute for Factory Operation and Automation IFF Measurement and Testing Technology		Marie Mackowiak-Knoche, human resources, personal@iff.fraunhofer.de, +49 391 4090 583		Dr.-Ing. Tamas Juhasz, researcher, tamas.juhasz@iff.fraunhofer.de, +49 391 4090 206	

Table D - Traineeship Certificate by the Receiving Organisation/Enterprise

Start date and end date of the completed traineeship: from [day/month/year]01/06/2018..... to [day/month/year]31/08/2018.....,
number of working hours per week: ...38..... hours

Traineeship title: : Research assistant in the field of industrial automation

Detailed programme of the traineeship period including tasks carried out by the trainee:

Mr Reizinger got familiar with an integrated engineering software called VINCENT – a tool for developing the control of automated production systems using a digital twin. Secondly, he worked with a C library for simulation of optical sensors (cameras, fringe projection sensors, etc.). He developed an application, which communicates with VINCENT and allows simulating the output e.g. of a camera attached to a robot in a VINCENT model. This is useful for planning inspection tasks. Placing the tool centre point in the centre of the field of view the developer can easily define target points such that the feature to be inspected is in the centre of the field of view. Using the simulation one can verify e.g. that there are no occlusions.

Knowledge, skills (intellectual and practical) and competences acquired (achieved Learning Outcomes):

Mr Reizinger came to us with very good programming skills and analytic capacity for solving programming tasks. Hence he could practically apply his capabilities for the development of a simulation application. For the graphical user interface he used for the first time Qt. Writing a python interface for an algorithm library, he had to find out details, which were not well documented, training his problem solving skills (stackoverflow, trial-error, etc.).

Evaluation of the trainee:

Mr. Reizingers knowledge background fitted extremely well for this task. He quickly understood the data structures of VINCENT and the simulation library. He did not need much help and was ambitious to find his own solutions. In addition, he was eager to write fast performing code. We are very satisfied with the result of his work. The team appreciated his friendly personality very much. Thanks to his very good knowledge of German language, communication was very easy.

Date: 2018-08-31

Name and signature of the Supervisor at the Receiving Organisation/Enterprise:

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